LOCON SENSOR PRODUCTS

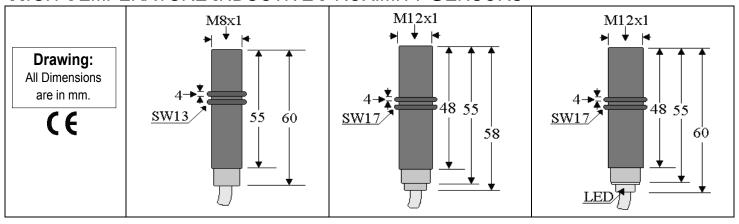
HIGH TEMPERATURE INDUCTIVE SENSORS



FEATURES

- 8 to 80mm housing options
- -40° to 482° F temperature range
- 2 to 50mm sensing range





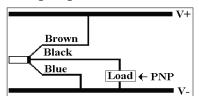
These sensors share the following specifications

- * The EMC (Electromagnetic Compatibility) resistance of the switches: IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 Level 2 IEC 61000-4-3 IEC 60255-5 1 kV
- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

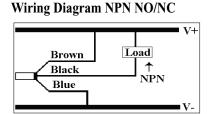
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Shielded	Shielded	Shielded
Sensing range in mm:	2	3	3
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	120mA up to 266°F, 70mA up to 284°F	120mA up to 266°F, 70mA up to 302°F	120mA
Switching Frequency:	800Hz	500Hz	500Hz
Short circuit limit:	Not available	Not available	Not available
Cable version:	Silicone	Silicone	Silicone
Operating temperature:	-14 to 284°F / -25 to 140°C	-14 to 302°F / -25 to 150°C	$-14 \text{ to } 266^{\circ}\text{F} / -25 \text{ to } 130^{\circ}\text{C}$
Target size:	8 x 8 x 1 mm ST37	12 x 12 x 1 mm ST37	12 x 12 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	No	No	Yes
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:			
PNP:	IN2-8HTPS	IN3-12HTPS	IN3-12HTPS/L
NPN:	Consult Factory	Consult Factory	Consult Factory

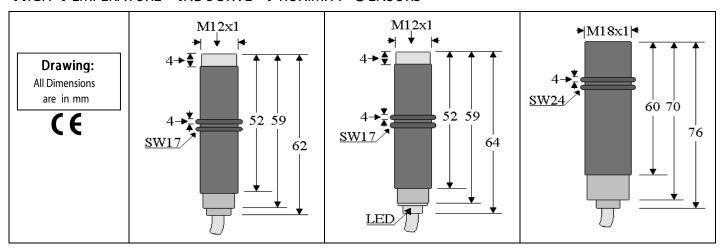
Wiring Diagram PNP NO/NC



Special types and silicone free Versions are available upon request







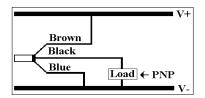
These sensors share the following specifications

- * The EMC (Electromagnetic Compatibility) resistance of the switches:
- IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV
- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

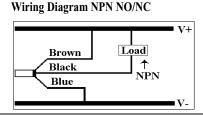
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Unshielded	Unshielded	Shielded
Sensing range in mm:	4	4	5
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	120mA up to 266°F, 70mA up to 302°F	120mA	150mA
Switching Frequency:	200Hz	200Hz	200Hz
Short circuit limit:	Not available	Not available	200mA
Cable version:	Silicone	Silicone	Silicone
Operating temperature:	-14 to 302°F / -25 to 150°C	$-14 \text{ to } 266^{\circ}\text{F} / -25 \text{ to } 130^{\circ}\text{C}$	-14 to 356°F / -25 to 180°C
Target size:	12 x 12 x 1 mm ST37	12 x 12 x 1 mm ST37	18 x 18 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	No	Yes	No
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:			
PNP:	IN4-12HTPSNB	IN4-12HTPSNB/L	IN5-18HTPS
NPN:	Consult Factory	Consult Factory	IN5-18HTNS

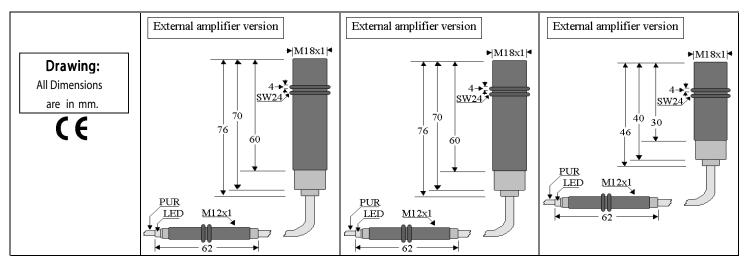
Wiring Diagram PNP NO/NC



Special types and silicone free Versions are available upon request







* The EMC (Electromagnetic Compatibility) resistance of the switches:

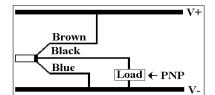
IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV

- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

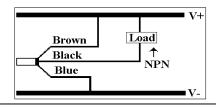
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Shielded	Shielded	Shielded
Sensing range in mm:	5	5	5
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	150mA	150mA	150mA
Switching Frequency:	400Hz	400Hz	400Hz
Short circuit limit:	200mA	200mA	200mA
Cable version:	Teflon	Teflon	Teflon
Operating temperature:	-14 to 446°F / -25 to 230°C	-14 to 482°F / -25 to 250°C	-14 to 446°F / -25 to 230°C
Target size:	18 x 18 x 1 mm ST37	18 x 18 x 1 mm ST37	18 x 18 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	Yes (on amplifier)	Yes (on amplifier)	Yes (on amplifier)
Options:	Cable length and cable type	Cable length and cable type	Cable length and cable type
Part Numbers:			
PNP:	IN5-18HTPSext	IN5-18HTPSext-250	IN5-1835HTPSext
NPN:	IN5-18HTNSext	IN5-18HTNSext-250	IN5-1835HTNSext

Wiring Diagram PNP NO/NC

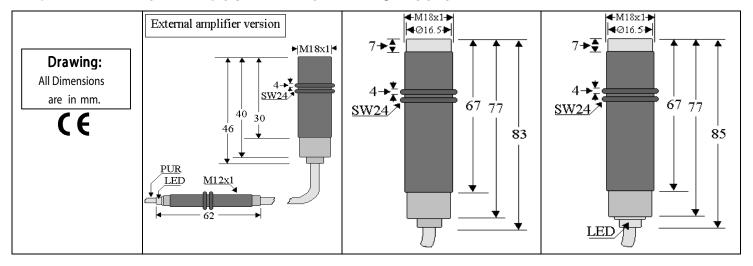


Special types and silicone free Versions are available upon request



Wiring Diagram NPN NO/NC





These sensors share the following specifications

* The EMC (Electromagnetic Compatibility) resistance of the switches:

IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV

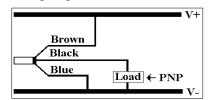
- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

NPN:

- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Shielded	Unshielded	Shielded
Sensing range in mm:	5	8	8
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	150mA	150mA	150mA
Switching Frequency:	200Hz	150Hz	150Hz
Short circuit limit:	200mA	200mA	200mA
Cable version:	Teflon	Silicone	Silicone
Operating temperature:	-14 to 482°F / -25 to 250°C	-40 to 356°F / -40 to 180°C	-40 to 266°F / -40 to 130°C
Target size:	18 x 18 x 1 mm ST37	18 x 18 x 1 mm ST37	18 x 18 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	Yes (on amplifier)	No	Yes
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:			
PNP:	IN5-1835HTPSext-250	IN8-HTPSNB	IN8-HTPSNB/L

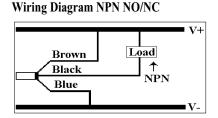
Wiring Diagram PNP NO/NC



Consult Factory

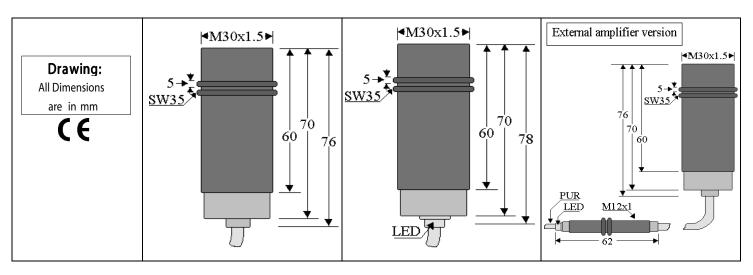
Special types and silicone free Versions are available upon request

IN8-HTNSNB



IN8-HTNSNB/L



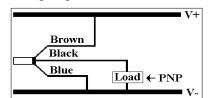


- * The EMC (Electromagnetic Compatibility) resistance of the switches:
- IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV
- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

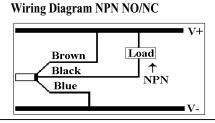
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Shielded	Shielded	Shielded
Sensing range in mm:	10	10	10
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	150mA	150mA	150mA
Switching Frequency:	100Hz	100Hz	100Hz
Short circuit limit:	200mA	200mA	200mA
Cable version:	Silicone	Silicone	Teflon
Operating temperature:	-40 to 356°F / -40 to 180°C	-40 to 266°F / -40 to 130°C	$-14 \text{ to } 446^{\circ}\text{F} / -25 \text{ to } 230^{\circ}\text{C}$
Target size:	30 x 30 x 1 mm ST37	30 x 30 x 1 mm ST37	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	No	Yes	Yes (on amplifier)
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:			
PNP:	IN10-30HTPS	IN10-30HTPS/L	IN10-30HTPSext
NPN:	IN10-30HTNS	IN10-30HTNS/L	Consult Factory

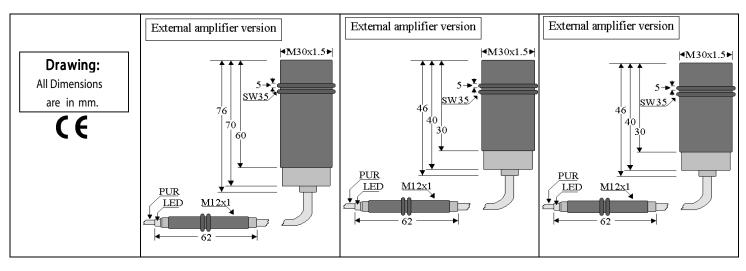
Wiring Diagram PNP NO/NC



Special types and silicone free Versions are available upon request







* The EMC (Electromagnetic Compatibility) resistance of the switches:

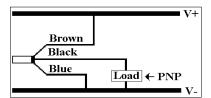
IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV

- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

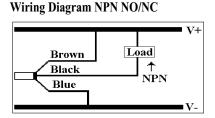
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Shielded	Shielded	Shielded
Sensing range in mm:	10	10	10
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	150mA	150mA	150mA
Switching Frequency:	100Hz	100Hz	100Hz
Short circuit limit:	200mA	200mA	200mA
Cable version:	Teflon	Teflon	Teflon
Operating temperature:	-14 to 482°F / -25 to 250°C	-14 to 446°F / -25 to 230°C	-14 to 482°F / -25 to 250°C
Target size:	30 x 30 x 1 mm ST37	30 x 30 x 1 mm ST37	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	Yes (on amplifier)	Yes (on amplifier)	Yes (on amplifier)
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:			
PNP:	IN10-30HTPSext-250	IN103035HTPSext	IN103035HTPSext-250
NPN:	Consult Factory	Consult Factory	Consult Factory

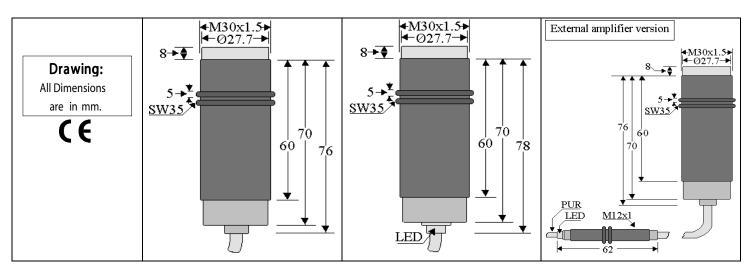
Wiring Diagram PNP NO/NC



Special types and silicone free Versions are available upon request







* The EMC (Electromagnetic Compatibility) resistance of the switches:

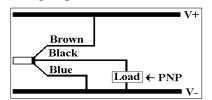
IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV

- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

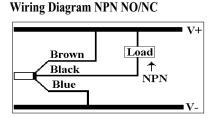
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Unshielded	Unshielded	Unshielded
Sensing range in mm:	15	15	15
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	150mA	150mA	150mA
Switching Frequency:	50Hz	50Hz	100Hz
Short circuit limit:	200mA	200mA	200mA
Cable version:	Silicone	Silicone	Teflon
Operating temperature:	-14 to 356°F / -25 to 180°C	-14 to 266°F / -25 to 130°C	-14 to 446°F / -25 to 230°C
Target size:	30 x 30 x 1 mm ST37	30 x 30 x 1 mm ST37	30 x 30 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	No	Yes	Yes(on amplifier)
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:		·	
PNP:	IN15-30HTPS	IN15-30HTPS/L	IN15-30HTPSext
NPN:	IN15-30HTNS	IN15-30HTNS/L	Consult Factory

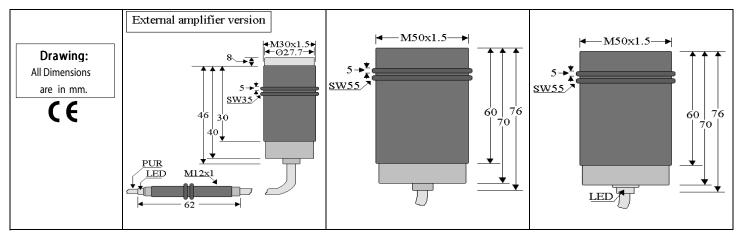
Wiring Diagram PNP NO/NC



Special types and silicone free Versions are available upon request







* The EMC (Electromagnetic Compatibility) resistance of the switches:

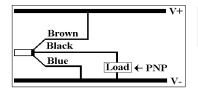
IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV

- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100 %

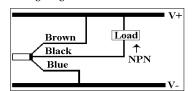
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Unshielded	Shielded	Shielded
Sensing range in mm:	15	20	20
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	150mA	150mA	150mA
Switching Frequency:	100Hz	50Hz	50Hz
Short circuit limit:	200mA	200mA	200mA
Cable version:	Teflon	Silicone	Silicone
Operating temperature:	-14 to 446°F / -25 to 230°C	$-14 \text{ to } 356^{\circ}\text{F} / -25 \text{ to } 180^{\circ}\text{C}$	-14 to 266°F / -25 to 130°C
Target size:	30 x 30 x 1 mm ST37	50 x 50 x 1 mm ST37	50 x 50 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 20%	3 to 20%
LED:	Yes (on amplifier)	No	Yes
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:	·		
PNP:	IN15-3045HTPSext	IN20-50HTPS	IN20-50HTPS/L
NPN:	Consult Factory	IN20-50HTNS	IN20-50HTNS/L

Wiring Diagram PNP NO/NC

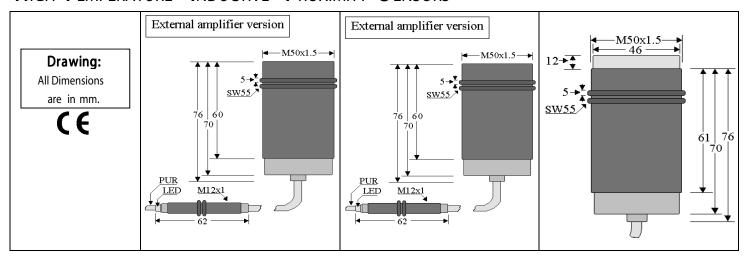


Special types and silicone free Versions are available upon request



Wiring Diagram NPN NO/NC





These sensors share the following specifications

* The EMC (Electromagnetic Compatibility) resistance of the switches:

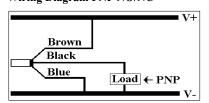
IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV

- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

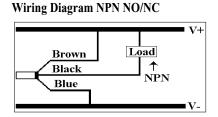
- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Shielded	Shielded	Unshielded
Sensing range in mm:	20	20	30
Supply voltage:	10-35VDC	10-35VDC	10-35VDC
Output function:	N.O.	N.O.	N.O.
Load current:	150mA	150mA	150mA
Switching Frequency:	100Hz	100Hz	50Hz
Short circuit limit:	200mA	200mA	200mA
Cable version:	Teflon	Teflon	Silicone
Operating temperature:	-14 to 446°F / -25 to 230°C	-14 to 482°F / -25 to 250°C	-14 to 356°F / -25 to 180°C
Target size:	50 x 50 x 1 mm ST37	50 x 50 x 1 mm ST37	50 x 50 x 1 mm ST37
Hysteresis:	3 to 15%	3 to 15%	3 to 15%
LED:	Yes (on amplifier)	Yes (on amplifier)	No
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	Cable length, Cable type, Connector
Part Numbers:		·	
PNP:	IN20-50HTPSext	IN20-50HTPSext-250	IN30-50HTPS
NPN:	Consult Factory	Consult Factory	Consult Factory

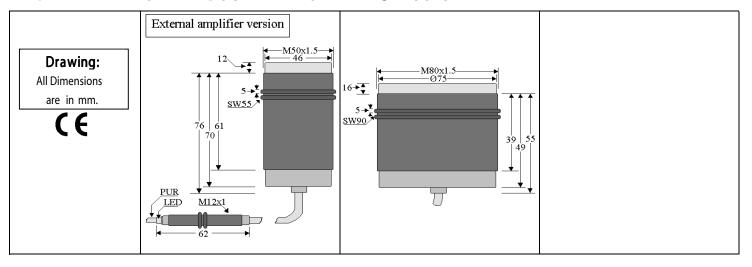
Wiring Diagram PNP NO/NC



Special types and silicone free Versions are available upon request







These sensors share the following specifications

* The EMC (Electromagnetic Compatibility) resistance of the switches:

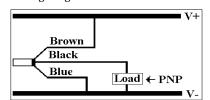
IEC 61000-4-2 Level 2 IEC 61000-4-4 Level 2 IEC 61000-4-3 Level 2 IEC 60255-5 1 kV

- * Sensing range can vary +/-20%
- * Voltage spikes (300V for 1mS, 10Hz)
- * All standard cables are 3 x 0.25mm² and a length of 2M.
- * Output capacity is 100nF.
- * Storage temperature -13°F to +176°F.
- * Relative humidity is 100%

- * Vibration resistant to 1mm amplitude at 55Hz.
- * Shock resistant to 30g for a period of 11mS.
- * Degree of protection (DIN 40 050) is IP67 (option: IP68)
- * Reverse polarity protection is incorporated on the supply voltage.
- * Load resistor of 100 KOhm is incorporated.
- * Leakage current is 8mA at 24V supply voltage.
- * Residual ripple is 15%
- * Voltage drop is aproximently 2V when sensor is on.

Technical Data:			
Mounting:	Unshielded	Unshielded	
Sensing range in mm:	30	50	
Supply voltage:	10-35VDC	10-35VDC	
Output function:	N.O.	N.O.	
Load current:	150mA	150mA	
Switching Frequency:	100Hz	50Hz	
Short circuit limit:	200mA	200mA	
Cable version:	Teflon	Silicone	
Operating temperature:	-14 to 446°F / -25 to 230°C	-40 to 356°F / -40 to 180°C	
Target size:	50 x 50 x 1 mm ST37	80 x 80 x 1 mm ST37	
Hysteresis:	3 to 15%	3 to 15%	
LED:	Yes (on amplifier)	No	
Options:	Cable length, Cable type, Connector	Cable length, Cable type, Connector	
Part Numbers:			
PNP:	IN30-50HTPSext	IN50-80HTPS	
NPN:	Consult Factory	IN50-80HTNS	

Wiring Diagram PNP NO/NC



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